

TO: Members of the Waste Management Steering Committee

FROM: W. H. Jackson, Director of Utility Services

MEETING DATE: September 9, 2013

SUBJECT: Report WMC13-014

Mattress Recycling Project – Implementation Plan

#### **PURPOSE**

To propose an implementation plan for recycling mattresses and box springs at the Peterborough County/City Waste Management Facility (the "Landfill").

## RECOMMENDATIONS

That the Waste Management Committee endorse the recommendations as outlined in Report WMC13-014 dated September 9, 2013 of the Director of Utility Services as follows:

- That staff be requested to proceed with implementation of the Mattress Recycling Pilot Project at the Peterborough County/City Waste Management Facility as detailed in Report WMC13-014; and
- b) That staff be requested to report further to the Waste Management Committee on the results of the Pilot Project identified in Recommendation (a) before proceeding with the full Mattress Recycling Program.

### **BUDGET AND FINANCIAL IMPLICATIONS**

Exact budget implications will depend upon the quantity of mattresses recycled. At \$16.70 per unit being paid to Tomlinson, and approximately \$2.50 in tip fee revenue, the estimated net cost to undertake the Mattress Recycling Pilot Project is \$12,000.

# **BACKGROUND**

The Waste Management Committee in considering Report WMC13-007 at its meeting of June 24, 2013, requested that staff:

"...report back at the September Committee meeting with detailed operating implications of the pilot project."

The intention of this Pilot Project is to better understand what operational issues may be encountered, and to get a more accurate indication of the number of mattress we would expect to encounter during a full scale implementation.

Following completion of the Pilot Project, a report will be submitted to the Waste Management Committee. Pending Committee endorsement, reports to County Council and City Council will follow, seeking acceptance to proceed to a full scale program if that is deemed feasible.

If the Pilot Project is not successful, a report will be submitted to the Waste Management Committee explaining why and offering advice on the next steps from there.

The following sections provide more detail on each of the proposed implementation steps.

### 1. Pilot Project: September 16, 2013 – October 31, 2013

This short Pilot Phase will assess how diverting mattresses from landfill will work operationally and provide a better gauge of the number of mattresses that will have to be dealt with. Due to the costs involved, it is recommended that this pilot be limited to six weeks, and then terminated until such time as a full-scale program can be implemented. During the Pilot phase, the following would apply:

- There will be no additional charges to residents;
- There will be no advertising, so that a true picture of the situation emerges;
- Small loads would go to platform as usual, but be off-loaded at a designated area beside a "mattress trailer":

- The Landfill Operators (Tomlinson) staff would be responsible for guiding people, and for loading the mattresses into the trailer:
- A count of mattresses would be made by the Landfill Operator staff as each mattress is loaded:
- Mattresses going directly to the tip face will be counted but these mattresses would be land filled as usual.

Some issues requiring decisions following the Pilot Phase include matters such as:

- Should dedicated loads of mattresses be banned from the Landfill altogether?
- Should a fee be charged for mattresses and box springs coming to the drop-off platform?
- If a fee is to be charged, how much should it be?
- What are the estimated costs of a full-scale mattress recycling program at the Landfill?
- What are the benefits to the Landfill operating and longevity of a full-scale mattress recycling program at the Landfill?
- What by-law changes would be required to implement a full-scale Landfill mattress recycling program?

# 2. Reporting and Notification Period: January 1 – May 31, 2014

In the case of a successful Pilot Project, reports to the County and City Councils will be required following endorsement by the Waste Management Steering Committee. These reports would outline the findings from the Pilot Phase and what would be the recommended next steps. Recommendations around fees and material bans would be included.

Assuming Councils approve continuation of the project to full implementation, notices would have be sent to all mattress retailers and garbage haulers, advising them of the program and how this may impact their operation/costs. It is felt that a minimum of 3 months notice would be required for the retailers/haulers to make alternate arrangements. Notices would also be posted at the landfill, and an education/promotion program undertaken through local newspapers and our municipal websites.

The current disposal by-law may require amendments depending upon decisions around fees and material bans.

#### 3. Full Implementation – June 1, 2014

Assuming Councils approve continuation of the program, recycling of mattresses would resume as of June 1, 2014 along with any new fees that are approved. Tomlinson would handle all the logistics of the program, similar to the Pilot Project.

#### 4. Budget Implications

Tomlinson's charge to operate all facets of the Pilot Project is quoted at \$16.70 per unit. This includes tractor-trailer rental, loading, record-keeping, transportation, and recycling. The City currently receives approximately \$2.50 per unit through tip fees and based on the proposed implementation plan, there would be no additional revenues received for mattresses during the Pilot Project. Net cost to recycle for this period is estimated at \$12,000.

Off-setting this cost is the significant savings in air space that would be realized, given that each mattress or bedspring consumes upwards of  $\frac{3}{4}$  of a cubic meter of space. Recent estimates have established the value of a cubic meter of Landfill space at \$33.48. Accordingly, while it will cost \$16.70 to recycle each mattress, it will cost in the order of \$25 to landfill that same mattress.

Submitted by,

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